

### French/English Review

DOV F. SAX, JOHN J. STACHOWICZ, and STEVEN D. GAINES (eds.). 2005. **Les invasions d'espèces: Considérées dans le cadre de l'écologie, de l'évolution et de la Biogéographie.** Sinauer Associates, 23 Plumtree Rd, Sunderland, MA 01375-0407, U.S.A. (Orders: 413-549-1118 fax; [orders@sinauer.com](mailto:orders@sinauer.com); [www.sinauer.com](http://www.sinauer.com)). \$51.95, 495 pp., b&w figures and tables, 7" × 9 1/4".

*French.*—Ce livre constitue une vue d'ensemble de nombreuses recherches ayant été menées sur les espèces invasives selon trois perspectives, écologique, biogéographique ou se rapportant à l'évolution biologique de ces espèces.

Dix-sept chapitres ont leurs propos illustrés grâce à des exemples tirés de publications soigneusement sélectionnées parmi des études concernant aussi bien le milieu aquatique, aérien que terrestre.

Les grands noms de la recherche se sont rassemblés pour mettre leur savoir en commun. La contribution de 45 scientifiques a permis de prendre en considération un large éventail de sujets allant de l'étude des communautés microbiennes, aux populations aviaires, en passant par le rôle des maladies infectieuses sur les communautés naturelles par exemple.

D'après les auteurs, ce livre peut-être lu dans sa globalité afin de connaître les tenants et aboutissants de nombreuses études antérieures, mais peut également être abordé par chapitre individuel selon les préoccupations de chacun.

Le lecteur peut comprendre comment l'étude des espèces invasives est devenue une discipline scientifique phare depuis les dernières décennies. Par exemple, l'étude des espèces invasives permet d'appréhender la façon dont un écosystème fonctionne « les invasions permettent d'observer les processus en temps réel, plutôt que de déduire les processus ayant eu lieu dans le passé seulement grâce aux modèles qu'ils ont pu engendrer ».

Ce livre est le dernier ouvrage sorti et constitue le premier de référence pour toute personne voulant orienter ses recherches vers les théories les plus récentes et vers les méthodologies dédiées à l'étude des invasions d'espèces.

*English.*—This book is an overview of previous research as well as current investigations about species invasions. The study of non-native species and their invasions can provide insights into ecology, evolution, and biogeography.

There are seventeen chapters that cover everything from aquatic to aerial and terrestrial invasions; each chapter ends with its own set of supporting references. Leading researchers were brought together to review the field of invasion biology. The contribution of 45 scientists has provided the editors with a diverse array of invasion examples such as microbial communities, avian populations on islands, to the role of the infectious diseases on natural communities. The editors note, "Individually, we believe that each of these chapters has something significant to offer. Collectively, we hope that this book has much to offer to both invasion biology and to our fundamental understanding of ecology, evolution, and biogeography."

The reader will quickly gain an understanding of why the study of invasive species has become an important scientific discipline in the last few decades. For instance, the study of invasive species helps to better understand the function of an ecosystem. "Looking closely at invasions allow us to observe processes in real time, rather than having to infer the operation of processes that occurred in the past solely from the patterns they generated."

This is the most recent book on species invasions and I recommend it to anyone interested in the biology of invasive species. It is a source of up-to-date information on current theories and methodologies and will be useful to researchers and graduate students working in this discipline.—*Virginie*

H. Raquet, Graduate Student, Botany Curatorial Assistant, E.L. Reed Herbarium Department of Biological Sciences Texas Tech University Flint & Main Avenues Lubbock, TX 79410-3131, U.S.A., virginie.raquet@ttu.edu

ANNA PAVORD. 2005. **The Naming of Names.** (ISBN 1-59691-071-2; hbk.). Bloomsbury Publishing, 175 Fifth Ave., New York, NY 10010, U.S.A. (**Orders:** <http://www.bloomsbury.com/>). \$45.00, 384 pp., illustrated, 8" × 9 5/8".

The natural world presents innumerable objects which humans have needed to categorize and name; animals, germs, stars, storms, rocks, and other huge kingdoms have eventually been broken down into types and grouped so that we could begin to understand them. *The Naming of Names* traces the search for order in the natural world. Such a process has taken many centuries, and we have gotten better at it with a scientific understanding of the world, but the impulse has been there for as long as we have been thinking about the things around us. Pavord, author of the *The Tulip* (2001), *Flower Power: the Meaning of Flowers in Art* (2003), and an expert gardener, details the history of plant taxonomy from the ancient Greeks to 17th-century British botanist John Ray. She reveals the history of plant classification and shows how the process was affected by intellectual, political and cultural thinking. The journey, traced here in detail for the first time, involves the culture of Islam, the first expeditions to the Indies and the first settlers in the New World.

In Athens, Aristotle's pupil Theophrastus was the first man ever to write a book about plants. How can we name, sort, and order them? He asked. The debate continues still, two thousand years later. *The Naming of Names* gives a compelling insight into a world full of intrigue and intensely competitive egos. She has gone back to the ancient Greeks, and shown how thinkers through the medieval ages and Renaissance tried to get a grasp on the disorderly plant kingdom, with eventual success even before the taxonomic standards laid down by Linnaeus which we still follow. It is the pre-Linnaean efforts that Pavord has chronicled. There is also a history of plant illustration within these pages. The eventual woodcuts did not have to be crude, with many reproduced here showing swirling masses of plants or delicate leaves in fine detail. The final engravings that become included in plant books could show enough useful detail to be excellent field guides, although for centuries authors relied on previous works of folklore.

Along with Theophrastus, Pavord's highest praise goes to Englishman John Ray, who in 1696 coined the term "botany." He provided six rules by which to categorize plants, not only the ones familiar to him in England, but the spectacular finds being brought from distant lands. Others had previously insisted on classifying plants by use, which was entirely artificial, or more helpfully by leaf or seed form, but it was Ray who put botany on its first real foundation by noting the distinction of seeds that sprout with one leaf or two (we still classify monocotyledon and dicotyledon). He knew he was part of an ongoing process, predicting that future botanists would look back and "our proudest discoveries will seem slight, obvious, almost worthless." He might have been right, but seen as a tribute to their efforts, *The Naming of Names* shows how these discoveries, achieved over the centuries by curious, devoted, and fallible plantsmen, have brought us to our current understandings. Pavord's book essentially ends with Ray, barely mentioning the recent advances that have been made with DNA testing; such tests have confirmed much of what was eventually realized as the evolutionary tree, but have upset other parts as well. It has been a long botanical trip, and Pavord's deep scholarship and inclusion of gorgeous illustrations make the journey enormous fun. The book is lavishly illustrated, with a third of the pages being taken up with illustrations (most in color) nicely keyed to the text.

In the best sections, she slows down to draw detailed portraits of researchers and describe how each contributed to the slowly evolving (and, until the late 1600s, unnamed) science of botany. The story makes for wonderful scholarship and tributes to the plantsmen who eventually made the jungle comprehensible. It would be an excellent choice for public libraries with a readership interested in the history of botany.—Gary Jennings, Botanical Research Institute of Texas, 509 Pecan Street, Fort Worth, TX 76102-4068, U.S.A.